



TOPIC: IMAGING THE POLES

PROJECT PERSONNEL:

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GENERAL BACKGROUND INFORMATION ON THE SUBJECT:

Scientists have collected many types of data that can be used to learn information about what an area is like, but most of these (sonar, radar, magnetic, seismic etc.) give one piece of information which doesn't give a really complete idea of what an area is like. Geomapapp has been developed to use many types of scientific data, allowing them to be visualized in a geographical map-based context, which greatly aids their interpretation. It is a free computer program that offers cool visualisation and exploration of geoscience data from around the globe, including the polar regions.

TERMS YOU SHOULD KNOW (VOCABULARY):

scientific data – Facts, numbers, measurements collected by scientists
data visualization – Techniques interpret data (numbers and measures) into images
research cruise – Trips organized to collect science information/data
ocean bathymetry – Measurement of the depth of the ocean floor
ice scours – Erosion or digging out caused by ice moving over an area
geophysics - The study of the physics of the Earth, especially its electrical, gravitational and magnetic fields, and the seismic waves within it
plate tectonics – The theory that the earth's surface is divided into a few large, thick plates that are continually moving.

WHY ARE WE STUDYING THIS IN THE POLAR REGIONS?

The polar regions offer exciting opportunities to study marine geology and geophysics. They are also key to understanding global oceanic and atmospheric processes. Many research cruises and field expeditions visit the polar regions each year to help us better understand the earth.

HOW DOES THIS AFFECT US HERE IN THE UNITED STATES?

Scientists across the U.S. study data collected in the polar regions. a major concern for humanity is Global warming. The effects will be felt here in the UNITED STATES and around the globe.

TO LEARN MORE ABOUT THIS TOPIC:

visit www.geomapapp.org to download the free software.